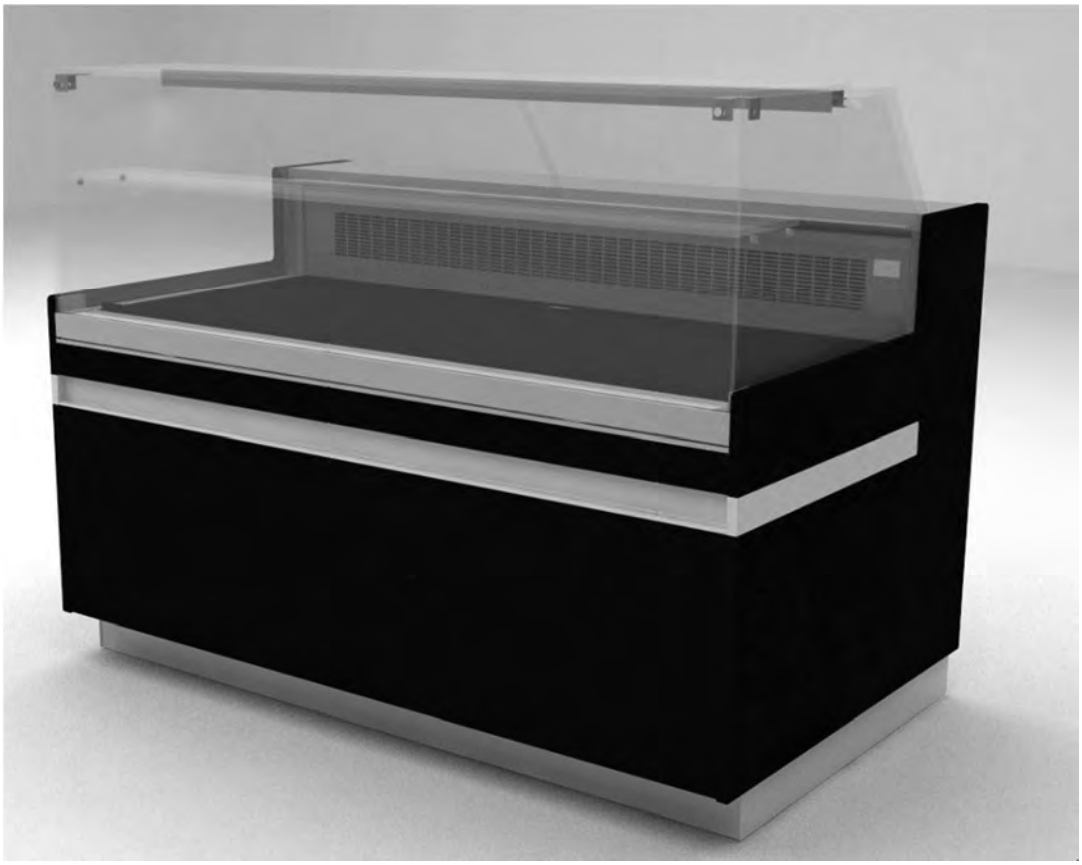
10/2017

Mod: **VB17XA1**

Production code: **VB17XA1**

Diamond
catering equipment

(EN) METRIKA DISPLAY COUNTER USE AND MAINTENANCE MANUAL



*CONTENTS (**EN**)*

1. **INTRODUCTION**

Carefully read the warnings in this booklet as they provide important installation safety, use and maintenance instructions.

Look after this booklet so that the various operators can refer to it.

All of our products comply with the **CE** marking as they have been designed and built in accordance with the directives listed in the declaration of conformity attached to the product.

2. **CHECKING THE GOODS**

Carefully remove the packaging and make sure that the product is intact.

Promptly report any damage to the carrier or manufacturer.

Under no circumstances can damaged goods be returned to the manufacturer without prior notice and without written authorisation.

Do not dispose of the packaging in the environment, as it is not biodegradable and may be a hazard source.

3. **INSTALLATION**

- Use suitable equipment to move each module to its final position, acting on the structural parts to prevent damage

- Remove the transport pallet or skids and the external packaging

- Remove the cardboard from between the sheets of glass and fully tighten the screws on the glass structure (the glass structure arrives already assembled by the manufacturer)

-Fit the middle glass shelf from the operator's side

-Fit the sliding Plexiglas panels in the corresponding guides (see “SLIDING PANELS”)

- Use the adjustable feet to level the module

- If there are several coupled modules, secure them to each other using the screws provided

4. **CLEANING BEFORE POWER-UP**

Before start-up, remove the protective film from the metal parts, thoroughly clean the glass using a soft sponge moistened with water and mild soap, and dry it thoroughly.

5. **ELECTRICAL CONNECTIONS**

Check that the mains voltage and frequency matches those indicated on the display counter identification plate at the back, on the operator's side (see fig.3). It is important to check the voltage, even during operation, because a higher or lower voltage could damage the motor-driven compressor. The permitted tolerance is ±10%. The warranty does not cover damage due to failure to comply with this requirement. Fit a suitable plug on the power cable (the manufacturer does not provide it). Do not use adapters, multiple sockets or extension cables.

N.B. Electrical system earthing is extremely important for safety and is a legal requirement.

6. **POWER-UP AND USE**

Only persons trained to use the equipment may do so.

To start the display counter, insert the power plug and press the red main switch (see fig.3), which also turns on the anti-condensation heater on the glass sides.

Press the green switch (see fig.3) to turn on the LED lighting in the display counter.

The display counter has a controller with a thermometer to keep the temperature inside the display surface constant, for automatic defrosting and to display the temperature. The controller has been programmed with the defrosting cycles and minimum and maximum temperatures at the factory, so the operator should never change the parameter settings. Use the instructions for the controller to change the display counter temperature and, in special cases, the parameters.

7. **SUPPORT**

In the event of a fault or malfunction, press the main switch (see fig.3) to turn off the system and disconnect the plug. For any repairs, please contact a qualified technician or the manufacturer, who will explain how to fully restore the system. Only use original spare parts. However, it is good practice to carry out some checks before calling a technician:

- Check that the plug is properly inserted into the socket

- Check that there is power at the socket

- Check that the products on the counter display surface are arranged in a way that allows the chilled air to circulate

- Check that the condenser (located on the motor unit) is not clogged. If it is, clean it thoroughly (see “MAINTENANCE AND CLEANING”)

- Check that a layer of ice has not formed on the evaporator

- Check that the controller is set to the operating temperature

- Check that the display counter is not performing defrosting

8. **DEFROSTING**

Due to the condensation of air, ice forms on the evaporator walls in all refrigerated display counters. This layer is effectively an insulator that reduces the refrigeration efficiency. To prevent this from happening, the controller automatically performs timed defrosting, and normally no additional manual defrosting is needed. If excessive humidity causes the layer of ice to exceed 5-6 mm in thickness, it is good practice to perform a complete defrosting cycle as follows:

- Turn of the main switch and disconnect the plug

- Move the products to another refrigerator and cover them properly to prevent them from returning to room temperature

- Use a jet of hot air to melt the ice faster

- The display counter has a fixed collection tray, complete with hot gas condensate evaporation. However, it does not work with the system turned off, so we recommend using another bowl that you can empty manually.

N.B. Never use knives or other metal or sharp objects to clean the evaporator

9. **SLIDING PANEL**

For hygiene reasons, the rear of the glass structure (operator's side) can be closed with sliding Plexiglas panels to protect the food from dust and insects:

- First inset the lower sliding panel on the RIGHT into the bottom guide on the top panel and farthest guide on the worktop (see fig.4)

- Then insert the upper sliding panel on the LEFT into the top guide on the top panel and the guide near the worktop (see fig.4)

N.B. Caution: only clean the sliding panels using a cloth moistened with water and mild soap (do not use alcohols, acids or solvents) see the "Chemical resistance" table

10. **OPERATIONAL CHECKS**

For normal operation, check that:

- The plug is connected to the power socket

- The system switches are on

- The internal temperature is suitable for the products

- The display counter is not under direct sunlight or high-power lamps

- The room temperature is no higher than 25 °C and relative humidity is no higher than 60%, as these are the condition for which the appliance is qualified (climate class 3)

- Sufficient airflow is guaranteed in the motor compartment and that the area in front of the grille is free of obstructions for at least 30 cm

11. **MAINTENANCE AND CLEANING**

Before carrying out maintenance and cleaning, move the products being preserved to another refrigerator so that they do not reach room temperature. Turn off the main switch (see fig.3) and disconnect the display counter from the mains power.

The mechanical parts of the refrigerator do not require any periodic maintenance, except for the condenser (see fig.2), which is very important to keep clean. **Dust and debris can easily settle on this part, preventing it from operating correctly. Clean the condenser with a brush, or preferably with a vacuum cleaner or air jet, at least once every six months. Before doing this, remove the protective grille, and refit it properly once the cleaning is finished.**

It is sufficient to clean the other parts of the display counter with a dry cloth or sponge moistened with water. For stubborn stains, use hot water with mild soap or sodium bicarbonate and dry thoroughly.

12. **INACTIVITY**

When the display counter will not be used for a long time, take the following measures:

- Turn off all switches on the display counter

- Disconnect the plug from the power socket

- Defrost, clean and thoroughly dry the inside and outside of the display counter as described above

- Leave the sliding Plexiglas panels slightly open (at least 10 cm) to prevent the formation of a musty smell

- When restarting, follow the instructions already given in the previous points

13. **IDENTIFICATION PLATE**

There is a **CE** identification plate affixed to the display counter (see fig.1), which provides the following data:

A) Manufacturer and address

B) Code

C) Article

D) Serial number

E) Voltage

F) Frequency

G) Absorption

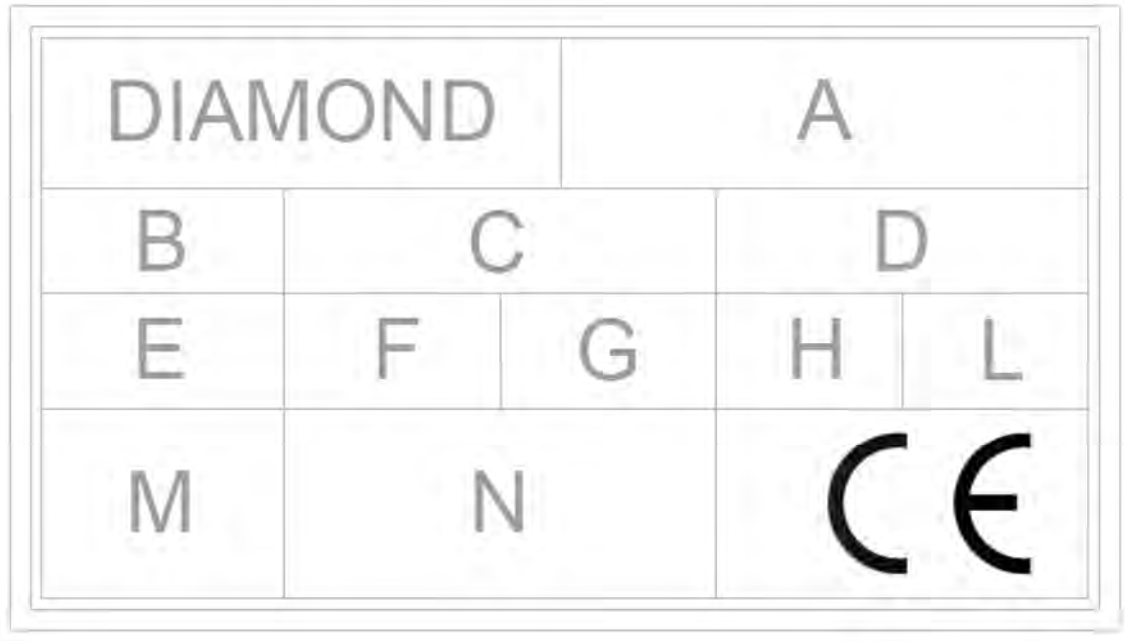
H) Refrigerant gas

L) Grams of refrigerant gas

M) Protection level

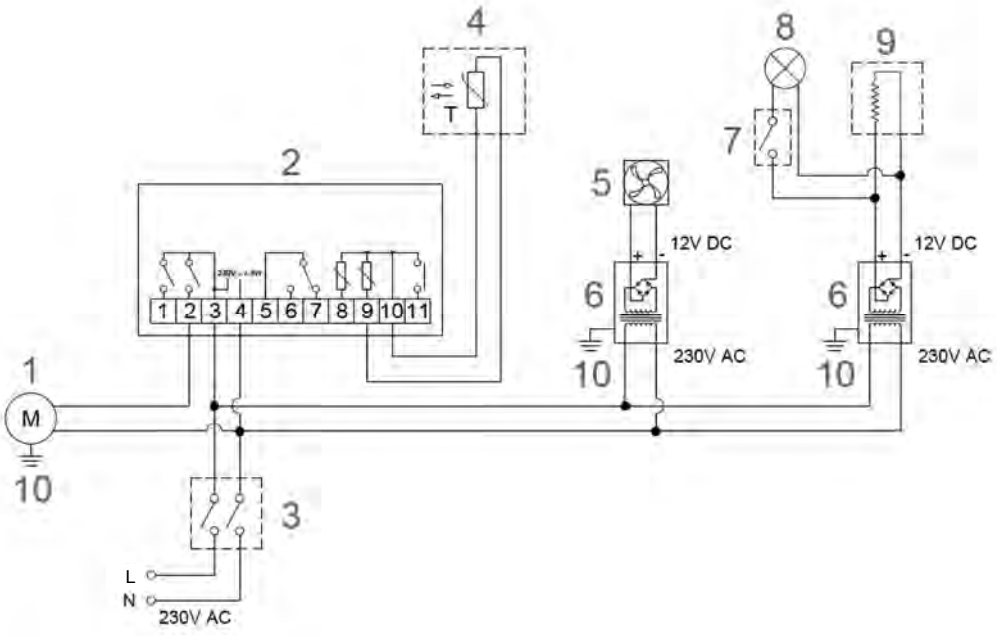
N) Year of manufacture

Figure 1:

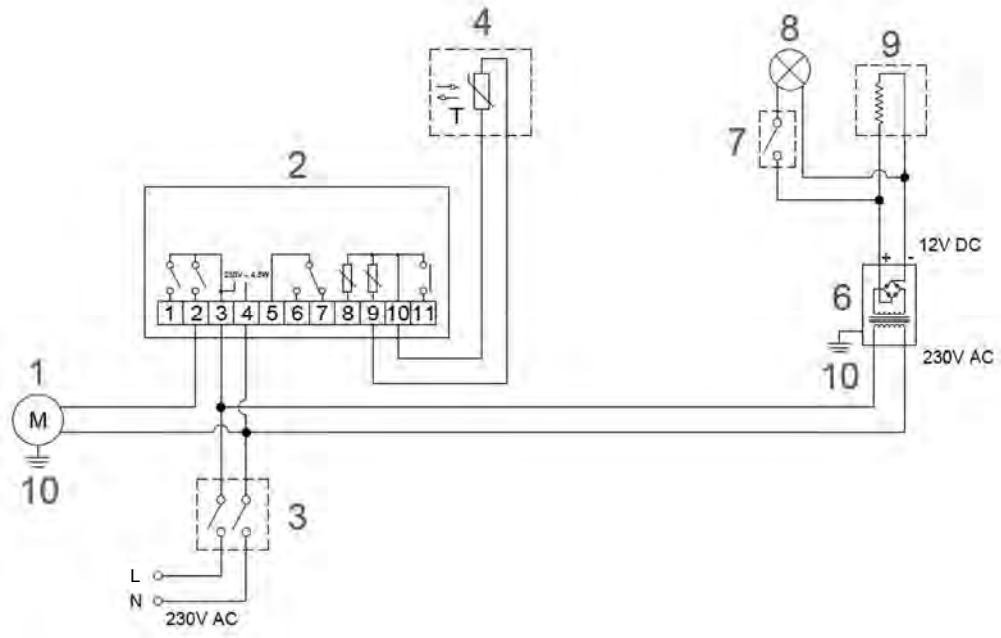


14. **ELECTRICAL SCHEMATICS**

VENTILATED



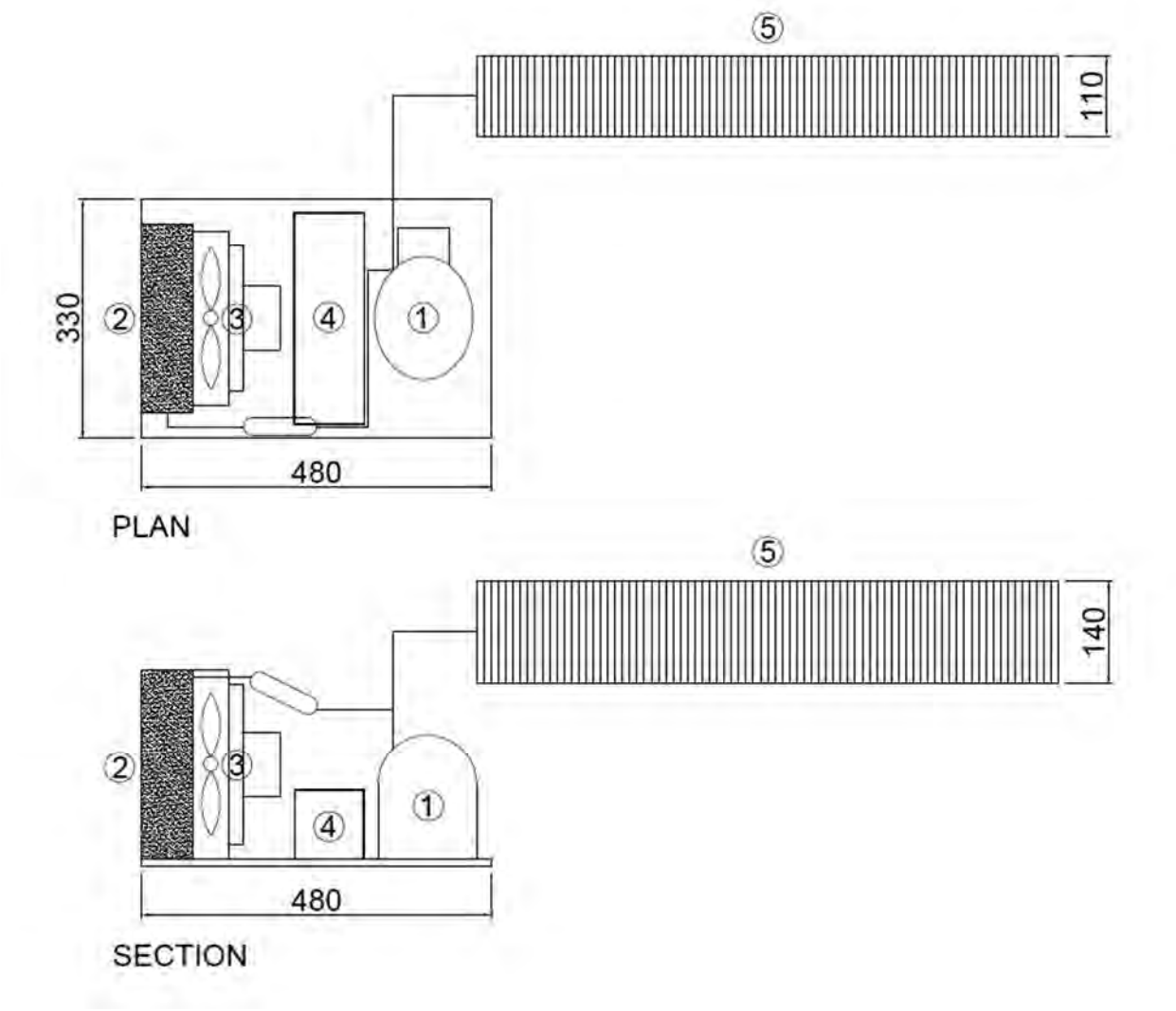
STATIC



1 230V AC MOTOR	6 12V DC TRANSFORMER
2 ELIWELL CONTROLLER WITH DISPLAY	7 LED SWITCH
3 BIPOLAR SWITCH	8 LED LIGHTING
4 TEMPERATURE PROBE	9 ANTI-CONDENSATION RESISTANCE ON GLASS SIDES
5 FANS	10 EARTH CONNECTION

15. **REFRIGERATION SYSTEM DIAGRAM**

Figure 2:



1. MOTOR-DRIVEN COMPRESSOR
2. CONDENSER
3. CONDENSER FAN
4. HOT GAS CONDENSATE EVAPORATION TRAY
5. EVAPORATOR

16. **WARNINGS**

It is very important to keep this instruction booklet with the display counter for future reference and for safety reasons

- Only adults may operate this appliance. Do not allow children to tamper with the controls or play with it

- Do not alter or modify the features of the appliance

- A qualified electrician or expert must carry out any electrical work required for installation or repairs

- Never try to repair the appliance by yourself. Repairs carried out by an inexpert person can harm the machine and the person

- The appliance is not suitable for preserving products other than food

- Do not install the appliance in direct sunlight

- Do not install the appliance near heat sources such as stoves, radiators, etc.

- Keep the compressor ventilation grille at least 30 cm from walls

- If there is abnormal ice formation on the evaporator, we recommend stopping the compressor and putting the products in a suitable refrigerated container at the same temperature for the time needed to defrost. Otherwise, the compressor will continue to work with low efficiency, causing an unnecessary waste of energy

- If the appliance remains inactive and unused, we recommend leaving the Plexiglas sliding panels open by at least 10 cm

The manufacturer shall not be held liable in the event of:
Improper use of the machine or operation by untrained personnel – Failure to comply with the instructions in this manual or the workplace safety regulations in force – Unauthorised modification, use of non-original spare parts or failure to carry out required maintenance

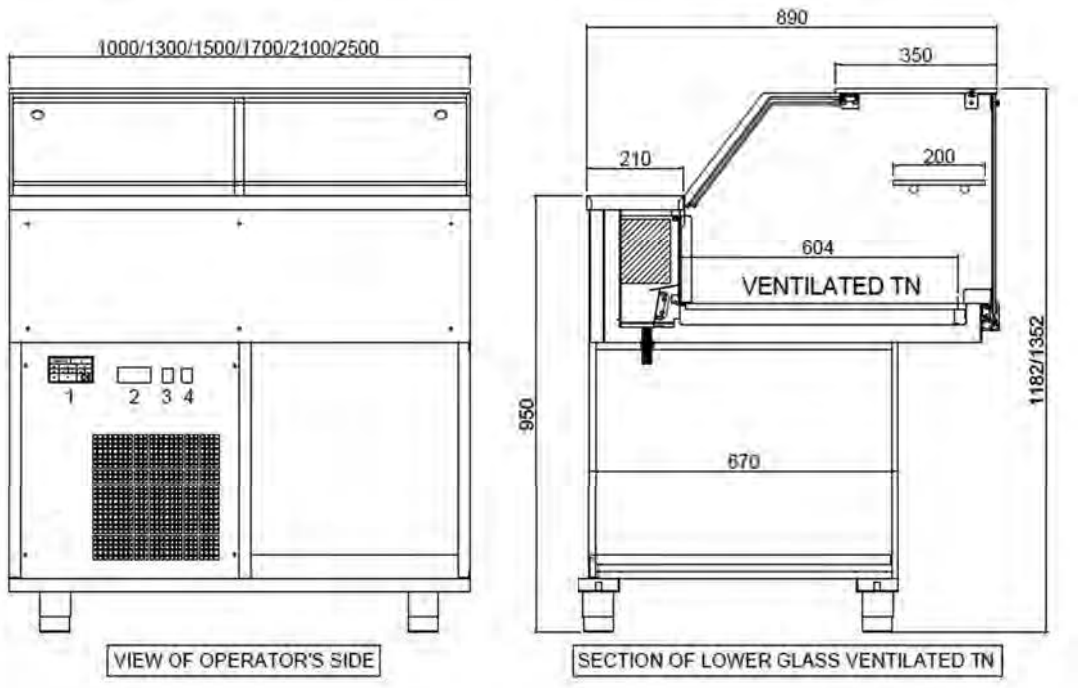
N.B. The manufacturer reserves the right to make improvements without prior notice

17. **WARRANTY**

The machine is covered by a warranty for a period of 12 months. The warranty is void in the event of failure to comply with the instruction and measure described in this manual.

18. **DRAWINGS**

Figure 3:



CONTROL PANEL WHEN A RESERVE CELL IS FORESEEN

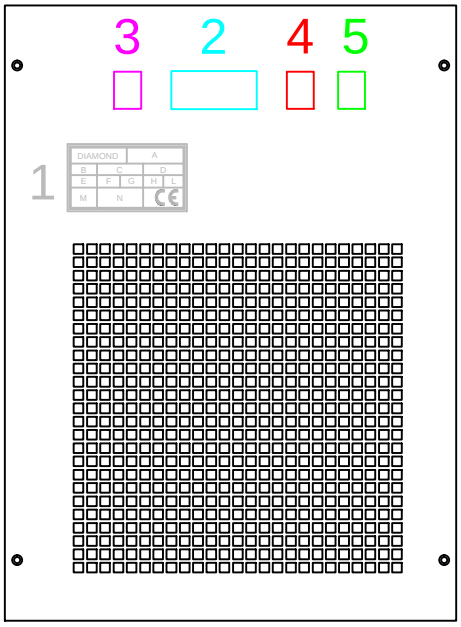
① ID PLATE

② ELIWELL CONTROL UNIT

③ RED GENERAL SWITCH (GIVING POWER TO THE WHOLE SYSTEM)

④ DISPLAY COUNTER SWITCH (RED)

⑤ DISPLAY COUNTER LIGHT SWITCH (GREEN)



THE RESERVE CELL HAS THE CONTROL UNIT AND THE POWER BUTTON ON THE TOP RANGE ON THE RIGHT OF THE CELL

THE SWITCH FOR THE LIGHTING OF THE FRONT PANEL IS SITUATED NEXT TO THE SCHUKO PLUG ON THE LEFT, BELOW THE COUNTER SERVICE TOP L=750

Figure 4: